

## **1. Modes of operation**

### **Run DAQ**

Normal running mode.

### **Run test**

Run in a diagnostic mode determined by the test selected with the test mode type parameter.

### **Stop**

Stop processing new data. Allow parameters to be set.

### **Reset**

Clear output FIFOs, DSP filters, and error flags. Reset state machines.

## **2. Commands**

### **Write**

Write parameter value.

### **Read**

Read parameter value

### **Reset ASIC Integrator**

### **Read ASIC command string**

### **Write ASIC command string**

### **Cal inject**

## **3. Channel parameters**

### **Disable**

Ignore data from disabled channel.

### **Sparsification threshold**

## **4. Global Parameters**

### **Sample rate**

Allows the ADC clock to be adjusted to something other than 16 MHz.

### **Test mode type**

Select test pattern or diagnostic type. Select point that test data enters readout algorithm (e.g. before or after DSP).

### **Test pattern data**

**Ideal signal data (match filter)**

**Interpolating FIR filter coefficients (match filter)**

**Noise filter coefficients**

**“Deconvolution” filter coefficients.**